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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

APR 15 1993
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matters of)

Rulemaking to Amend Part 1 and Part 21)
of the Commission's Rules to Redesignate)
the 27.5 - 29.5 GHz Frequency Band and)
to Establish Rules and Policies for Local)
Multipoint Distribution Service;)

CC Docket No. 92-297

RM-7872; RM-7722

Applications for Waiver of the Commission's)
Common Carrier Point-to-Point Microwave)
Radio Service Rules;)

Suite 12 Group Petition for Pioneer's)
Preference)

PP-22

University of Texas - Pan American Petition)
for Reconsideration of Pioneer's Preference)
Request Denial)

REPLY COMMENTS

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behalf of its domestic, affiliated,
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April 15, 1993

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SUMMARY

GTE believes the record supports the Commission's proposal to allocate 2 GHz of spectrum in the 28 GHz band for a new telecommunications service. This new service, currently called Local Multipoint Distribution Service ("LMDS"), will provide a means of delivering a host of new offerings to the American public.

GTE agrees that each licensee of LMDS should receive 1 GHz of spectrum, and that the service area should be based on Metropolitan Statistical Areas and Rural Service Areas. The record also supports the FCC's tentative conclusion not to have any set-asides for particular parties or particular applications. Educational applications can and will be carried on commercial systems.

Some of the FCC's discretion to make certain policy judgments may already be limited by Congressional action, and any final rules must comport with statutory guidance. Where the FCC does have discretion, it should exercise that discretion to allow for a level playing field and parity of regulation for all parties. The degree of regulation should also be limited and afford parties the widest range of choices in technology and methods of providing new services. No particular type of technology should be mandated, and FCC technical criteria should be limited to that required to control interference.

The record also shows supports for revised construction deadlines and construction intervals. However, there should be no weakening of the FCC's anti-speculation rules, and GTE has provided specific measures to strengthen this aspect of the FCC's proposal. While GTE supports the award of one market area to Suite 12 as a Pioneer's Preference, GTE opposes Suite 12's request for two areas.

As modified by GTE's Comments and Reply Comments, GTE supports the FCC's decision to redesignate the 28 GHz band to accommodate LMDS technology and launch a new service.

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REPLY COMMENTS

GTE Service Corporation, on behalf of its domestic, affiliated, telephone, equipment and service companies ("GTE"), hereby responds to the Comments of other parties¹ filed in response to the Commission's Notice of Proposed Rulemaking, Order, Tentative Decision, and Order on Reconsideration, released January 8, 1993 in this proceeding. ("NPRM" or "Notice").² In the NPRM, the Commission proposes a redesignation of use of the 28 GHz band from point-to-point microwave common carrier service to a Local Multipoint Distribution

¹ See Appendix A for a list of the other parties and the abbreviations used to refer to their Comments or other pleadings.

² See 8 FCC Rcd 557.

Service ("LMDS"). (NPRM, ¶1) The Commission also addresses pending applications for waiver of the Common Carrier Point-to-Point Microwave Radio Service rules filed in anticipation of Commission action on the referenced Petitions for Rulemaking. (*Id.*) The Notice also addresses two Petitions for Pioneer's Preference, one of which is before the Commission on a Petition for Reconsideration of the FCC's staff's action dismissing the request. (*Id.*)

INTRODUCTION

In its initial Comments, GTE supported the FCC's proposal to redesignate the 28 GHz band for a new service called Local Multipoint Distribution Service ("LMDS") with certain modifications to the proposed rules.³ The new service is expected to provide the public alternative means of delivering one-way and two-way, video, data, and other telecommunications services. GTE notes that the overwhelming majority of other parties' Comments agree with GTE and support the allocation of spectrum for the new service.

Of those parties addressing the issue, the majority of parties also agree with GTE that the FCC's proposal to assign 1 GHz of spectrum to each of two licensees per service area is the preferred structure.⁴

There were other areas of substantial agreement among the commenting parties. Metropolitan Statistical Areas ("MSA") and Rural Service Areas ("RSA") were the overwhelming recommendation for size of licensing areas,⁵ and a ten-year license term was the primary choice discussed.⁶ Thus, there is substantial agreement in the record on many of the FCC's proposals.

With respect to some of the other issues raised in the Comments, GTE offers the following replies.

at 3, Cardiff at 1, NYNEX at 4, M/A Com at 1, Catel at 1, and the University of TX at 7. The following parties support 2 licensees per market area: GTE at iv, Sprint at ii and 12, Rumore at 2, Suite 12 at 8, Rock Hill at 2, CWC at 3, Ameritech at 2, US West at ii and 2, Joplin at 2, Carney at 1, Cardiff at 1, RSW at 11, Eagle at 2, NYNEX at 4, M/A Com at 1, and Catel at 1.

5 The following parties support MSA/RSA license areas: GTE at 16-19, Sprint at 8, Total TV at 5, Hornby at 5, Levin at 5, Kingswood at 5, Seiter at 5, King at 5, Video\Multipoint at 5, Foresight at 5, Virginia Communications at 5, Milani at 5, GEC at 6, Metrocom at 5, Haddon at 5, Cyrus at 5, STV at 5, Amby at 5, Multi-Micro at 5, Mettler at 5, Western Sierra at 5, US Interactive at 10, SenVista at 5, Rock Hill at 7, Acor at 5, Wireless Cable at 5, Gilio at 5, M3Illinois at 5, USTA at 6, BellSouth at 7, TDS at 5, and NYNEX at 7.

6 Ten-year license terms were supported by: GTE at 19-21, Sprint at 14, Rumore at 5, Total TV at 9, Hornby at 9, Levin at 9, Kingswood at 9, Seiter at 9, King at 9, Video\Multipoint at 9, Foresight at 9, Virginia Communications at 9, Milani at 9, GEC at 9, Metrocom at 9, Haddon at 9, Cyrus at 9, STV at 9, Amby at 9, Multi-Micro at 9, Mettler at 9, Western Sierra at 9, SenVista at 9, Suite 12 at 44, Acor at 9, Wireless Cable at 9, Gilio at 9, University of CA at 5, Ameritech at 7, Box Springs at 3, Carney at 3, M3Illinois at 9, EMI at 4, Cardiff at 3, Eagle at 5, BellSouth at 14, NYNEX at 7, and Bell Atlantic at 6.

DISCUSSION

As the FCC proposed, there should be no set-asides.

Having tentatively decided against setting aside portions of the proposed 2 GHz of LMDS spectrum for special purposes or particular providers, the Commission nevertheless asks for information on "the probable relative demand of commercial video entertainment programming and educational or other non-commercial programming." (NPRM, ¶19, n.6) The Universities of California, Colorado and Texas, among other educational institutions and organizations, recommend that the Commission set aside as much as half the allocable spectrum for instructional or other non-commercial purposes.

Faced a year ago with similar suggestions in the analogous Interactive Video and Data Services ("IVDS") proceeding, the Commission declined to prejudge the likeliest uses of the new service:

We believe that educational interests should have access to IVDS systems and, indeed, that interactive technology has promising educational potential. However, we believe the better course is to allocate sufficient spectrum for a competitive market structure and for full development of a wide range of services, including educational applications. Thus, we feel that it would be premature to set aside spectrum for specific uses.⁷

Given the checkered history of set-asides for Instructional Television Fixed Service ("ITFS"), the hesitation expressed above is understandable. Over the past decade, based on under utilization for the original purpose, the Commission

⁷ Interactive Video and Data Services, GEN Docket No. 91-2, 7 FCC Rcd 1630, 1633 (1992) As here, educational interests had urged set-aside of as much as half the spectrum, which was to be divided between two licensees per market. As here, the interactive capability of the radio medium was touted for its instructional uses.

has reallocated 30 per cent of the original ITFS channels to commercial use and has allowed ITFS licensees increasing flexibility in leasing their spectrum for commercial purposes or migrating to other frequencies to accommodate commercial uses.⁸

The symbiotic relationship that has come to exist between commercial multichannel video distributors and ITFS licensees has been described by several commenters in this proceeding. The distributors, it seems, need ITFS spectrum and the educational licensees require cash. According to the WCA, which wants its own set-aside:

[B]y assisting wireless cable operators, [the FCC] will also be assisting the ITFS community that has become dependent on wireless cable for financial support. Virtually every ITFS facility being funded today is the product of a partnership between the licensee and a wireless cable operator. (WCA at 19)

While supporting a set-aside strictly limited to non-commercial use, RSW takes a darker view of the hybrid creation resulting from ITFS leasing. Noting allegations that "the ability of ITFS licensees to lease excess capacity airtime for commercial use has been abused by several would-be profiteers," RSW declares:

In fact, the risk of abuse in this regard is so high that should the Commission allow non-commercial licensees to lease their spectrum, we would support both bands being allocated for commercial use, rather than participate in a ruse or a sham. (RSW at 9 and n.16)

⁸ Instructional TV Fixed Service, 94 FCC 2d 1203 (1983); Amendment of Part 74, 101 FCC 2d 50 (1985); Report and Order, GEN Dockets Nos. 80-113 and 90-54, 5 FCC Rcd 6410 (1990); Second Report and Order, GEN Docket No. 90-54, 6 FCC Rcd 6792 (1991).

As a strong supporter of advanced telecommunications for improved education,⁹ GTE nevertheless reads the ITFS history as an admonition about the difficulty of predicting the extent and rate of growth of public-sector demand for communications. Repeatedly in the past decade, fiscal constraints and the relatively slow pace of official decision-making have caused educational radio frequencies to lie fallow for longer than desired.

Nor is terrestrial radio the only medium at hand for so-called "distance learning." Satellite distribution systems offer wide coverage where interactivity is not required. Closed fiber or other broadband systems increasingly are available and affordable for two-way communication. It would be painfully ironic if a proceeding begun to put fallow spectrum at 28 GHz to use resulted in special reservations of frequencies which, despite good intentions, remained unused for long periods.

GTE repeats its belief that set-asides would not serve the public interest. The burden of proof is especially high for those who, in advocating reservation of one of the two frequency blocks for non-commercial purposes, would eliminate or diminish the opportunity for commercial competition.¹⁰ As it did with IVDS, the Commission should encourage licensees to accommodate educational and other non-commercial uses. If such encouragement fails to produce results and greater need for public access to LMDS spectrum manifests itself, the Commission has the power to revise its licensing rules accordingly.

⁹ See, e.g., 1992 Report on Cerritos by GTE California Incorporated, submitted March 30, 1993 to Chief, Domestic Facilities Division, Common Carrier Bureau, FCC, at 29-33.

¹⁰ Splitting the remaining commercial block into two licenses of 500 MHz each would weaken the ability of one or both licensees to compete with the incumbent cable system.

**Cable operators are barred by statute from LMDS licenses:
LECs are only restricted to the extent of the 1984 codification.**

GTE (at 10-11), and a number of other commenters, have pointed out that the Commission's tentative conclusion that license eligibility restrictions should not be imposed for LMDS directly contradicts Section 11 of the Cable Television Consumer Protection and Competition Act of 1992, P.L. 102-385, amending Section 613(a) of the Cable Communications Policy Act of 1984.¹¹ Section 11's prohibition against cable operators holding a license for "multichannel multipoint distribution service" reflects Congress' intent to prevent cable operators from using their monopoly position to dominate the radio services upon which "wireless cable" competitors depend.¹² Section 11 thus imposes a restriction on cable operator participation in LMDS.

CRB objects to this reading of Section 11. CRB insists that the 1992 Cable Act and its legislative history show an intent to restrict cable only as to enumerated services.¹³ Because LMDS is not one of the services addressed by Section 11, CRB argues that no restriction should apply.

11 47 U.S.C. §533(a)(2).

12 GTE at 10.

13 CRB at 6. Caribbean (at 3) offers a variant on the named-services theory which ends up proving too much. Because the 1992 Act conferees decided to drop Direct Broadcast Satellite ("DBS") services from the Section 11 restrictions on cable, Caribbean contends, "Congress apparently made a policy decision to exclude emerging technologies from its cross ownership ban." However, like DBS, LMDS was known to exist, and a form of it was actually under test, when the 1992 Act was adopted. If Congress had wanted to exclude LMDS by name it could have done so, as it did with DBS. That Congress did not make express exception for LMDS strongly supports the contention of GTE and others that the new service is covered by the generic Section 11 ban on cable licensing in "multichannel multipoint distribution service."

But this overly narrow reading of Section 11 would defeat the intent behind its enactment. As the WCA notes,¹⁴ Congress deliberately used in the statute the generic term "multichannel multipoint distribution service," of which "Multichannel Multipoint Distribution Service" ("MMDS") is a subset referenced, for example, in the legislative history. Other commenters note the inconsistency of ascribing to Congress the intent to impose restrictions on cable cross-ownership of MMDS without ascribing a similar intent as to LMDS, which is distinguished primarily by its greater channel capacity.¹⁵

Several commenters would improperly extend the licensing ban to local Exchange Carriers ("LECs") as well as cable operators. As GTE pointed out in its Comments, there is no provision similar to Section 11 of the 1992 Cable Act applicable to LECs.¹⁶ Local exchange carrier delivery of video is governed by the 1984 partial codification of earlier rules, as modified by the video dial tone order of last August.¹⁷ The arguments of CWC and M3Illinois in favor of imposing a cross-ownership ban on LECs are based on unfounded assertions that LECs will be able to coopt LMDS technology and thereby squeeze out independent LMDS operators.¹⁸ Neither Congress nor the FCC, however, has made such a finding in the case of multichannel radio licenses, where LECs are not forbidden to hold licenses. Furthermore, as Rochester discusses in its

14 WCA at 12.

15 Sprint at 10, CWC at 12, and Metrocom at 8.

16 GTE at 11.

17 Second Report and Order, CC Docket No. 87-266, 7 FCC Rcd 5781 (1992).

18 Nor does Video/Phone support its suggestion (at 14) for a "diversity" preference which apparently would work against any company or medium already conducting communications in a market area.

Comments, LEC participation will complement video dial tone and will help to provide effective competition to traditional cable service.¹⁹

**Freedom to choose regulatory status
should be applied even-handedly.**

The Commission tentatively has decided, at least as to video services, to allow LMDS providers to elect whether to provide service on a common or non-common carrier basis. A large number of commenters support this conclusion. GTE has simply urged the Commission to ensure that there is similar regulation for similar services. GTE is concerned that given the greater regulatory burdens associated with common carriage vis-a-vis private carriage, truly fair competition cannot exist without parity of regulation.²⁰ Thus, GTE opposes suggestions, such as that made by Video/Phone,²¹ requiring LECs to be common carriers in their own service areas. GTE's position is echoed by other commenters.²² In addition, as BellSouth points out, freedom to choose a service's regulatory status is irrelevant unless the service is also operated in a manner consistent with that choice.²³

The Commission has also sought comment on the affect of 47 U.S.C. §332 upon a licensee's regulatory status. Virtually all commenters agree that

19 Rochester at 8.

20 GTE at 8. Also see the early-filed Reply Comments of Bell Atlantic at 2. ("Bell Atlantic urges the Commission to assure all service providers a level playing field by adopting rules that do not award one group of competitors an artificial advantage over another.")

21 Video/Phone at 11.

22 Rochester at 6; Sprint at 3; Ameritech at 4.

23 BellSouth at 3.

any LMDS entity engaging in the resale of telephone service for profit must be regulated as a common carrier. GTE and US West also pointed out, however, that LMDS may not qualify at all as mobile or private in the Section 332 analysis.²⁴ Applications of LMDS that are not private land mobile are not affected by Section 332.

The FCC's policy desires which would require preemption must still pass legal muster.

As a matter of policy, there are some parties who would prefer a single source of communications regulation at the federal level to multiple and potentially conflicting constraints at other levels of government. However, the adoption of desirable policy is no benefit if it cannot be sustained in court.

Judicial declarations as to the "inherently interstate" nature of broadcasting probably extend to satellite delivery of video as well, even if transmission is not directly to the home. The case is far from clear, however, as to video programming which does not depend on wide-ranging dissemination by satellites or terrestrial networks. Today, in contrast to the circumstances of the 1960s and 1970s, some video delivery may legitimately be characterized as intrastate. If so, GTE knows of no reason why states could not assert jurisdiction and/or challenge successfully any attempted federal preemption.

While the reservation to state authority in Section 2(b) of the Communications Act of 1934, as amended, 47 U.S.C. §152(b), speaks in terms of "carrier" communications and this in turn traditionally has been read to exclude private carriage, regulators and advocates alike have long recognized

²⁴ GTE at 13; US West at 8.

the limited usefulness of the 17-year-old precedent attempting to distinguish common from private carriage.²⁵ It is no easier with video than with voice or data to differentiate the indifferent holding out to the public of a common carrier *carrying from the automated offering usually to a class of "eligibles" of a private*

25 per cent and 50 per cent of population are proposed by some.²⁸ Video/Phone suggests using the alternative measure of "businesses establishments served" instead of population served.²⁹ The construction interval is requested to be extended to 5 or 6 years.³⁰ Sprint (at 9) urges "less stringent service requirements for RSAs."

GTE (at 18-19) urged that the FCC adopt a construction requirement of 75% of the population in the service area within five years. This threshold would still provide a rapid introduction of the new service, while also lowering the initial entry barriers. GTE believes this change, coupled with the requirement to have the first cells operational in 18 months after licensing, will reduce capital requirements for such systems, thus, encouraging a wider range of potential participants; will bring service to the public sooner; and will not allow spectrum to be tied up for a prolonged period before it becomes available for relicensing.

The record supports strong anti-speculation rules.

Many of the parties support strong rules to minimize speculation in spectrum. GTE in its Comments offered additional measures to strengthen the anti-speculation rules. GTE (at 22-23) urged that the FCC require performance bonds as well as a demonstration by LMDS applicants who propose to deliver

28 For example, see Total TV at 5, Hornby at 5, Levin at 5, Kingswood at 5, Seiter at 5, King at 5, Video\Multipoint at 5, Foresight at 5, Virginia Communications at 5, Milani at 5, GEC at 6, Metrocom at 5, Haddon at 5, Cyrus at 5, STV at 5, Amby at 5, Multi-Micro at 5, Mettler at 5, Western Sierra at 5, SenVista at 5, Acor at 5, Wireless Cable at 5, and Gilio at 5. WCA at 23 proposes phasing of requirements from 20% to 40% of the service area over three years.

29 Video/Phone at 18.

30 Many parties support five years, and Suite 12 suggests a period as long as six years. (Suite 12 at 36)

video services of a firm commitment for access to programming. GTE notes that the FCC's Chief Engineer has testified about the value of strict rules in preventing speculation and trafficking in spectrum. In his testimony March 17, 1993, before the Subcommittee on Communications of the Committee on Commerce, Science and Transportation of the United States Senate, on S.335, "The Emerging Telecommunications Technologies Act of 1993," Thomas P. Stanley, Chief Engineer of the FCC, stated (at 8):

[T]here is the potential that a successful licensee could either sell the spectrum for profit, or, alternatively, sit on the spectrum and not develop it. . . . To prevent such occurrences, the Commission can exercise its public interest authority to enact loading or trafficking rules as appropriate, and the statute could empower the Commission to require performance bonds in appropriate cases. (emphasis added)

Thus, the Commission already has acknowledged the wisdom of using this mechanism to minimize spectrum speculation.

GTE also urged the FCC (at 23) not to use a "contingent winners" approach to lotteries. Video/Phone also disfavors the contingent winners approach: "Video/Phone agrees that if the Commission selects and names more than just the winning applicant, there is a likelihood of greater litigiousness as the 'second' or 'third' selectees would attempt to have the winner disqualified." (Video/Phone at 21) Video/Phone then points out that if the initial selectee is determined not to be qualified, another lottery could be required and this would add needless delay. Video/Phone suggests that the Commission, with appropriate safeguards, select several applications, "but only reveal the identity of the winner; if the winner is subsequently disqualified, than (and only then) would the Commission reveal the identity of the next selected applicant." (*Id.*) This approach avoids the need for and delay caused by subsequent lotteries.

GTE supports this modification offered by Video/Phone. However, the FCC should seek to strengthen, not weaken its other anti-speculation rules, including strengthening the financial showing requirement.

The record discloses that all parties support technical flexibility for LMDS.

GTE (at 6-7) urged the FCC to allow potential LMDS applicants the greatest degree of technical flexibility in selecting their services, their equipment, and their network designs. The only FCC-specified technical rules should be those required to prevent interference between LMDS licensees and between LMDS and other licensed services. Most of the Comments support giving the LMDS licensees the greatest latitude possible in technical trade-offs. Although some parties support Suite 12³¹ because they are suppliers to Suite 12, potential investors in Suite 12 technology, or licensees of Suite 12's technology, the FCC should not require use of any particular technology in delivering LMDS.³² The marketplace should determine the services required and the appropriate technologies to deliver those services.

³¹ Often the support also goes to endorsing Suite 12's Pioneer's Preference. While GTE noted that Suite 12's Pioneer's Preference application was not opposed, and, thus, GTE supported the FCC's tentative award of a preference to Suite 12 for LMDS, GTE does not support Suite 12 getting a preference in two markets, and, accordingly, opposes the request to award both Los Angeles and New York to Suite 12 for LMDS. (For example, see Suite 12 at 49 and RSW at 3).

³² GTE, therefore, does not agree with Suite 12 that any particular type of antenna must be used or specified in the rules. (See Suite 12 at 24.)

CONCLUSION

As modified by these Reply Comments, GTE supports the FCC's decision to redesignate the 28 GHz band to accommodate LMDS technology and launch a new service.

Respectfully submitted,

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Its Attorney

APPENDIX A

In addition to GTE, the following parties filed Comments or other pleadings in response to the NPRM:

Everett T. Acor, Jr. ("Acor");
Alpha Industries Inc. ("Alpha");
Faith C. Amby ("Amby");
Ameritech ("Ameritech");
Association of America's Public Television Stations, et al., ("AAPTS");
Baderwood International, Ltd. ("Baderwood");
Bell Atlantic Personal Communications, Inc. ("Bell Atlantic");
BellSouth Corporation, et al. ("BellSouth");
Box Springs Educators ("Box Springs");
Alex Brown & Sons, Incorporated ("Brown");
University of California ("University of CA");
Calling Communications Corporation ("CCC");
Cardiff Broadcasting Group ("Cardiff");
Caribbean Communications Corp. ("Caribbean");
Joseph D. Carney & Associates ("Carney");
Catel Telecommunications ("Catel");
Cellular Television Associates, Inc. ("CTA");
Coalition for Wireless Cable ("CWC");
Cole, Raywid & Braverman ("CRB");
University of Colorado at Boulder ("University of CO");
Competitive Cable Association ("CCA");
Cyrus Partnership ("Cyrus");
Dataflow Systems ("Dataflow");
Digital Microwave Corporation ("DMC");
Eagle Engineering & Communications Group, Inc. ("Eagle");
Educational Parties ("Educational");
EMI Communications Corporation ("EMI");
Foresight Communications ("Foresight");
GHz Equipment Company ("GEC");
Robin V. Gilio ("Gilio");
Guy Law Office ("Guy");
Perry W. Haddon ("Haddon");
Harold Hornby ("Hornby");
Hughes Space and Communications Company and Hughes Network Systems, Inc. ("Hughes");
Joplin Beepers, Inc. ("Joplin");
King Broadcasting Associates ("King");
Kingswood Associates ("Kingswood");
Michael H. Levin ("Levin");
Robert M. Linz, P.E. ("Linz");

Loral Qualcomm Satellite Services, Inc. ("Loral");
M3 Illinois Telecommunications Corp. ("M3Illinois");
M/A COM, Inc. ("M/A Com");
Metrocom Telecasting ("Metrocom");
Mettler Communications, Inc. ("Mettler");
Patricia B. Milani ("Milani");
Motorola Inc. ("Motorola");
Motorola Satellite Communications, Inc. ("Motorola Satellite");
Multi-Micro, Inc. ("Multi-Micro");
National Aeronautics and Space Administration ("NASA");
National Association for the Advancement of Colored People ("NAACP");
National Captioning Institute, Inc. ("NCI");
NYNEX Mobile Communications Company ("NYNEX");
Pacific Telesis Group, et al. ("PacTel");
RioVision of Texas, Inc. ("RioVision");
Rochester Telephone Corporation ("Rochester");
Rock Hill Telephone Company, et al. ("Rock Hill");
RSW Communications, Ltd. ("RSW");
SenVista General Partnership ("SenVista");
Sprint Corporation ("Sprint");
Steven P. Seiter ("Seiter");
Subscriber TV Partners ("STV");
Suite 12 Group ("Suite 12");
Technology Engineering Company ("TEC");
Telephone and Data Systems, Inc. ("TDS");
University of Texas System ("University of TX");
Total TV, Inc. ("Total TV");
Utilities Telecommunications Council ("UTC");
United States Interactive and Microwave Television Association ("US Interactive");
United States Telephone Association ("USTA");
US West, Inc. ("US West");
Victor Rumore ("Rumore");
Video\Multipoint, Inc. ("VMI");
Video/Phone Systems, Inc. ("Video/Phone");
Virginia Communications, Inc. ("Virginia Communications");
Western Sierra Bancorp ("Western Sierra");
Wireless Cable Association International, Inc. ("WCA");
Wireless Cable, Ltd. ("Wireless Cable");

Certificate of Service

I, Ann D. Berkowitz, hereby certify that copies of the foregoing "Reply Comments" have been mailed by first class United States mail, postage prepaid, on this 15th day of April, 1993 to all parties of record.



Ann D. Berkowitz